

outer dimension greater than the dimension of the distal end of the cannula for displacing tissue to form a surgical cavity therein.

4. (Amended) [The dissector of claim 1 wherein the cannula further comprises:] A tissue dissector comprising:

an elongated cannula, having a proximal end and a distal end;

a tip having tapered outer walls and being disposed on the distal end of the cannula for inserting into tissue;

a dilating element disposed on the cannula at a location thereon

intermediate the distal and proximal ends thereof and having an

outer dimension greater than the dimension of the distal end of the

cannula for displacing tissue to form a surgical cavity therein; and

a locking mechanism, positioned near the distal end of the cannula at a location recessed from the tip disposed on the distal end of the cannula; and the dilating element further comprises a mating lock to mate with the locking mechanism for positioning the dilating element on the cannula at a location thereon recessed from the distal end thereof.

5. (Amended) The dissector of claim 1 wherein a spacer length is disposed intermediate the tip and the dilating element, the spacer length having an outer dimension less than the outer dimension of the dilating element, for positioning the dilating element

within an angle of the tapered outer walls of the tip to permit contact of the outer walls of the tip with a target vessel.

10. (Amended) [The dissector of claim 1 in which the dilating element is expansively resilient, and comprising:] A tissue dissector comprising:

an elongated cannula, having a proximal end and a distal end;

a tip having tapered outer walls and being disposed on the distal end of the cannula for inserting into tissue;

an expansively resilient dilating element disposed on the cannula at a location thereon intermediate the distal and proximal ends thereof and having an outer dimension greater than the dimension of the distal end of the cannula for displacing tissue to form a surgical cavity therein; and

a sheath slidably positioned on the cannula, and having a distal end disposed upon the dilating element in a first position and recessed from the dilating element in a second position. for reducing the outer dimension of the dilating element responsive to being in the first position and for allowing the expansion of the outer dimension of the dilating element responsive to being in the second position.

11. (Amended) [The dissector of claim 1] A tissue dissector comprising:

an elongated cannula, having a proximal end and a distal end;

a tip having tapered outer walls and being disposed on the distal end of the
cannula for inserting into tissue; and
a dilating element disposed on the cannula at a location thereon
intermediate the distal and proximal ends thereof and having an
outer dimension greater than the dimension of the distal end of the
cannula for displacing tissue to form a surgical cavity therein in
which the tip and the dilating element form a single unit and a
proximal end of the unit comprises a threaded end and the distal
end of the cannula has compatible threads disposed on an inner
surface of the distal end of the cannula, for allowing the proximal
end of the unit to mate with [is configured to mate to] the distal
end of the cannula.

12. (Amended) A method for enlarging a surgical cavity about a target vessel, using a tissue dissector having a portion thereof of solidly expanded dimension and having a transparent tip with tapered outer walls positioned at the distal end of the tissue dissector, the method comprising:

incising skin;

dissecting within the incision to expose a surface of the target vessel;

positioning a tapered outer wall of the transparent tip of the tissue

dissector on the surface of the vessel;

advancing the tissue dissection under endoscopic visualization through the

transparent tip; and

simultaneously expanding the surgical cavity in a lateral direction
responsive to the portion of the tissue dissector of expanded
dimension, as the tissue dissector is advanced.

Kindly add the following new claims:

14 ~~20.~~ A method of dilating tissue using a surgical device having a solid dilating element
disposed near a transparent tapered tip, comprising:

incising skin overlying tissue to be dilated;
inserting the surgical device into the incision; and
advancing the device and concurrently visualizing the tissue and dilating
the tissue responsive to the advancement of the device.

15 ~~21.~~ The apparatus of claim 1 wherein the solid dilating element is a shell rigidly
disposed on the cannula.

16 ~~22.~~ A tissue dissector comprising:
an elongated cannula, having a proximal end and a distal end;
a tip having tapered outer walls and being disposed on the distal end of the
cannula for inserting into tissue; and
a dilating element having a fixed size disposed on the cannula at a location
thereon intermediate the distal and proximal ends thereof and
having an outer dimension greater than the dimension of the distal

end of the cannula for displacing tissue to form a surgical cavity therein.

17¹⁶ 23. The apparatus of claim 22 wherein the dilating element is solid.

18¹⁶ 24. The apparatus of claim 22 wherein the dilating element comprises expansively resilient foam.

19¹⁶ 25. The apparatus of claim 22 wherein the dilating element comprises a rigid shell.

20¹⁶ 26. A method for enlarging a surgical cavity about a target vessel, using a tissue dissector having a portion thereof of having a fixed expanded dimension and having a transparent tip with tapered outer walls positioned at the distal end of the tissue dissector. the method comprising:

incising skin;

dissecting within the incision to expose a surface of the target vessel;

positioning a tapered outer wall of the transparent tip of the tissue

dissector on the surface of the vessel;

advancing the tissue dissection under endoscopic visualization through the

transparent tip; and

simultaneously expanding the surgical cavity in a lateral direction

responsive to the portion of the tissue dissector of expanded

dimension, as the tissue dissector is advanced.